

REMARKS

The Examiner is thanked for the telephone interview conducted on October 7, 2010, in connection with the above-identified application. During this telephone interview, the Examiner was asked specific questions in connection with allegations by the Examiner on pages 2 and 8 of the Office Action mailed July 13, 2010. During this telephone interview, the Examiner indicated that she had extended the search and examination to non-elected species of the compound set forth on page 2 of the Office Action mailed July 13, 2010, since she had not been able to find prior art upon which she could reject the elected specie of compound 127. The Examiner also indicated that reference to the mGluR5 receptor in the second full paragraph on page 8 of the Office Action mailed July 13, 2010, was in error, and that the reference should have been to the GPR4 receptor. No agreement was reached during this telephone interview.

Applicants are amending the disclosure of the above-identified application by adding Figs. 1-4, which in substance are the same as Figs. 1-4 of International (PCT) Application No. PCT/JP2005/003656, of which the above-identified application is a National Stage application filed under 35 U.S.C. 371. Emphasizing that the above-identified application is a National Stage Application filed under 35 U.S.C. 371, and thus the International (PCT) Application No. PCT/JP2005/003656 is the appropriate and complete application, it is respectfully submitted that the added drawing figures to the English language disclosure do not add new matter to the application.

Applicants are amending their claims in order to further clarify the definition of various aspects of the present invention. Specifically, Applicants are cancelling previously considered claims 1-76 without prejudice or disclaimer, and are adding

new claims 77-95 to the application. Noting the restriction requirement and election-of-species requirement in the Office Action mailed March 24, 2010, and the Response filed April 26, 2010, it is respectfully submitted that all of the newly added claims 77-95 read on the elected invention and elected specie.

Of the newly added claims, claims 77 and 89 are independent claims, and each is directed to a bicyclic heterocyclic compound. Claim 77 recites that this compound is represented by the formula (IIIa), with claim 89 reciting that this compound is represented by the formula (IIIb). Claim 77 defines R^{11e} and $R^{35a-37a}$ consistent Applicants original disclosure; while claim 89 defines substituents X^3 and X^4 , $R^{35a-37a}$, and R^{45a} and R^{45b} , consistent with Applicants' original disclosure.

Of the other newly added claims, which are dependent claims, claims 78-80, each dependent on claim 77, each further defines R^{11e} ; and claims 81-88, dependent variously on claims 77-80, further define R^{35a} , R^{36a} and R^{37a} .

Claims 90-95 are each dependent on claim 89, with claims 90 and 91 further defining X^3 and X^4 ; and claims 92-95 further defining R^{45a} and R^{45b} .

Note, for example, pages 23-28 of Applicants' specification, together with the compound III embodiments, as described starting from page 88 of Applicants' original disclosure.

The comment by the Examiner on page 3 of the Office Action mailed July 13, 2010, that the subject matter of the above-identified application "admits of illustration by a drawing to facilitate understanding of the invention"; and the reference by the Examiner to pages 116-119 of the present specification, as discussing Figs. 1-4, but no figures are found in the instant application, are noted. Applicants are submitting new drawing sheets with Figs. 1-4, which were in the original disclosure of the international (PCT) application (differing from the original in that legends and terms

were in Japanese, rather than in English as in the enclosed new sheets). As these drawings figures were in substance in the international application as filed, the addition of these drawing figures does not constitute new matter.

In addition, in light of the submission of Figs. 1-4, it is respectfully submitted that the objection to the disclosure, as set forth on pages 3 and 4 of the Office Action mailed July 13, 2010, is moot.

In view of the newly submitted claims 77-95, it is respectfully submitted that claim objections set forth on page 4 of the Office Action mailed July 13, 2010, are moot. That is, the expression "as described above" in previously considered claims, objected to by the Examiner, has been omitted from the presently submitted claims, such that the claim objections on page 4 of the Office Action mailed July 13, 2010, are moot.

It is respectfully submitted that the rejection of claim 34 under the second paragraph of 35 U.S.C 112 as indefinite, in that the provisos of the claim are unclear, is moot, in that such provisos are not in newly submitted claims 77-95.

The rejection of claims 68-76 under the second paragraph of 35 U.S.C. 112, as being indefinite, and under 35 U.S.C. 101, are moot, in that the present claims do not recite "use" of the bicyclic heterocyclic compound or the pharmaceutically acceptable salt thereof.

The rejection of various of the claims being considered on the merits in the above-identified application, under the first paragraph of 35 U.S.C. 112, "because the specification, while being enabling for the treatment of neutrophilic asthma" with the compound set forth at the top of page 7 of the Office Action mailed July 13, 2010, "does not reasonably provide enablement for the treatment of neutrophilic asthma with any other compound or for treatment or prevention of any other disease derived

[from] hyperfunction of GPR4 or any neutrophilic inflammatory disease", is noted. It is to be noted that the Examiner has not objected claim 34 on this basis.

Note that the present claims are directed to specified compounds, without reciting an intended use of such compounds. Furthermore, the present claims do not recite any method of treating diseases. In view of the presently submitted claims, it is respectfully submitted that the rejection under the first paragraph of 35 U.S.C. 112 is moot.

It is emphasized that Applicants' original disclosure sets forth various uses of the compounds of the type as in the present claims, and it is respectfully submitted that the Examiner has not provided any reasons to doubt such uses. In this regard, it is again emphasized that the present claims are directed to compounds, not uses. Thus, it is respectfully submitted that the rejection under the first paragraph of 35 U.S.C. 112, set forth on pages 6-16 of the Office Action mailed July 13, 2010, is moot.

Applicants respectfully submit that all of the claims presented for consideration by the Examiner patentably distinguish over the teachings of the reference applied by the Examiner in rejecting claims in the Office Action mailed July 13, 2010, that is, the teachings of U.S. Patent No. 5,374,638 to Dhanoa, et al., under the provisions of 35 U.S.C. 102 and 35 U.S.C. 103.

It is respectfully submitted that this reference as applied by the Examiner would have either disclosed nor would have suggested such a bicyclic heterocyclic compound or pharmaceutically acceptable salt thereof, as in the present claims, represented by either of the formula (IIIa) or (IIIb); and, in particular, this reference would have neither taught nor suggested such compound wherein the substituent R^{11e} has a cyclic structure as in claim 77, especially a cycloalkyl group as in claims

78-80 (note corresponding cyclic structure of formula (IIIb)). In particular, the applied reference would have neither taught nor would have suggested such compound as in the present claims, wherein R^{11e} represents the groups as set forth in claim 77; or the cyclic structure with substituents X³, X⁴, R^{45a} and R^{45b}, as in claim 89.

In addition, it is respectfully submitted that the teachings of the applied reference do not disclose, nor would have suggested such bicyclic heterocyclic compound or pharmaceutically expectable salt thereof has in claims 77 and 89, with additional features as in the other dependent claims in the application.

The bicyclic heterocyclic compounds and pharmaceutically acceptable salts thereof are preventive and/or therapeutic agents for neutrophilic inflammatory diseases. Note, for example, page 3, lines 2-5, of Applicants' specification.

Dhanoa, et al. discloses non-peptidic endothelin receptor antagonists, particularly useful for the treatment of asthma, hypertension, pulmonary hypertension, arteriosclerosis, as well as other inflammatory diseases, or endotoxic shock caused by or associated with endothelin. Note, column 1, lines 7-19. Note also column 2, lines 12-17 of this patent. Note compounds of the general Formula I in column 3, lines 20-32 of this patent document, with various substituents of compounds of the general Formula I being defined in columns 3-11 of this patent document.

It is respectfully submitted that Dhanoa, et al. does not disclose, nor would have suggested, such bicyclic heterocyclic compound as in the present claims, including the cyclic structure at R^{11e} in claim 77, or cyclic structure of formula (IIIb) with cyclohexyl ring and substituents thereon of claim 89.

Reference by the Examiner to Table II in column 25 of Dhanoa, et al., on page 16 of the Office Action mailed July 13, 2010, and repeated on page 18 thereof, is

noted. The Examiner has also referred columns 35 and 36 of this applied reference, as disclosing pharmaceutical agents. It is respectfully requested that the Examiner reconsider the prior art rejections in light of the claims as presently amended, including Z of the applied reference as well as X thereof.

In view of the foregoing comments and amendments, reconsideration and allowance of all claims presently pending in the above identified application are respectfully requested.

To the extent necessary, Applicants hereby petition for an extension of time under 37 CFR 1.136. Kindly charge any shortage of fees due in connection with the filing of this paper, including any extension of time fees, to the Deposit Account of Antonelli, Terry, Stout & Kraus, LLP, Account No. 01-2135 (case 506.46539X00), and please credit any overpayments to such Deposit Account.

Respectfully submitted,

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Enclosures: Drawing sheets